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GARLICK HARRISON & MARKISON
P.O. BOX 160727
AUSTIN, TX 78716-0727

EXAMINER	
SWEET, LONNIE V	

ART UNIT	PAPER NUMBER
2419	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/785,233	NASSAR, AYMAN ESAM	
	Examiner	Art Unit	
	LONNIE SWEET	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/10/2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-11 and 13-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-11 and 13-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

Receipt is acknowledged of the response filed 02/10/2009. Claims 2 and 12 have been cancelled and claims 1, 3-11, and 13-23 are pending. An action on the merits is as follows.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 6, 7, 11, 16, 17, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narayanan US 7,346,771 (hereinafter Nara) and Ananian US 2003/0028451 (hereinafter Ana).

Regarding **claims 1 and 11,** Nara teaches a telecommunications system for provisioning an inter-provider internet protocol service (i.e., SLA), that consists of a first network and second network managed by a first and second service provider respectively, labeled ISP1 and ISP2, having a plurality of resources, such as gateways and gateway protocols, whereby the second network is capable of receiving a request for the inter-provider IP service (i.e. SLA) [See Nara, Fig. 1, Elements 10 (telecom system); 16 (first network and ISP1); 18 (second network and ISP2); 26, 28, 38 and 40 (Gateway/gateway protocols for ISP1); and 30, 32, 42, and 43 (Gateway/gateway

protocols for ISP2), Column 5, Lines 29-34]. Within the networks Nara teaches that routing tables maintain and exchange updated path reach-ability information related to other routers of between routers in their current network and between routers of a different network different networks [Nara, Column 5, Lines 1-9 and 22-34]. In addition to exchanging reach-ability information, Nara teaches the presence of determined additional resources, identified as public keys and other cryptography resources, which correspond to the routers are needed for securely communicating between networks based on reach-ability information and SLA [Nara Column 5, Lines 8-34 and Column 6, Lines 14-27]. Lastly, Nara teaches that provision occurs automatically as part of protocol exchange message process between the first network and the second network using cryptography [Nara, Column 6, Lines 8-11], but Nara does not teach the information to be distributed anonymously.

However, Ana discloses the anonymous distribution of information [Ana, Paragraph 2].

It would have been obvious to one of ordinary skill in the art to combine the teachings of Nara indicating a telecommunications system indicating the provisioning of resources and services between networks, the teachings of Ana indicating that a networking system may perform various duties anonymously. The resulting benefit would have been a system offering increase security by anonymously inter-networking.

Regarding **claims 6, 7, 16, and 17**, Nara teaches a telecommunications system [Nara Figure. 1, Element 10] with a means for calculating real-time cost information prior

to provisioning services such as cost, traffic characteristics and peering points, described as SLA attributes. In which the agreed upon attributes between devices, which serve as evidence of a comparison, are interpreted as the cost requirements and the cost information of the system, and as a result of the agreement of the SLA, also interpreted as an electronic contract, determine whether to utilize cryptographic resources [Nara, Column 5, Lines 22-53].

Regarding **claim 23**, the telecommunications system consist of resources that include network, hardware, and software resources such as, routing paths, routers, and routing protocols respectively [Nara, Column 3, Lines 28-35].

Claim 3-5, 8-10, 13-15, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nara, in view of Ana, and further in view of Ramstrom et al. US 5,960,004 (hereinafter Ramstrom).

Regarding **claims 3 and 13**, the combination of Nara and Ana teaches the telecommunications system of Claim 1, but fails to teach a unified and integrated switch connected to said first network and said second network, said unified and integrated switch having common resources, a first portion of the common resources being dedicated to the first service provider and being capable of being configured by the first service provider, a second portion of the common resources being dedicated to the

second service provider and being capable of being configured by the second service provider.

However, Ramstrom teaches a switch component [See Ramstrom, Fig. 6, Element 52] that connects a plurality of network nodes shown as elements 53, 54, 55, and 56. The switch 52 consists of application modules shown as elements 65, 66, and 67 to handle the functions of the networks connecting to it. The switch further includes common resources 69 being dedicated to each network node [See Ramstrom, Fig. 6, Column 8, lines 30-52]. Additionally, Ramstrom shows that the switch can support different services for the many network nodes as long as the required software is added to the application modules [Ramstrom, Column 2, Lines 14-21]. Since the common resources are accessible by network modules, it is evident that the sources can be configured according to the service a particular network node is compatible with.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify the teaching of Nara and Ana to include a switch for connecting the networks and for configuring the shared resources as taught by Ramstrom. The benefiting result of the combination would be the allowance of multiple specific telecommunication applications to be performed with optimum functionality within the same switch device [Ramstrom, Column 3, Lines 10-15].

Regarding **claims 4 and 14**, the combination of Nara and Ana teaches the telecommunications system of Claim 3. However, it fails to teach the unified and integrated switch which includes a first logical communications node associated with the

first service provider and capable of being dynamically configured in a customized manner by the first service provider and a second logical communications node associated with the second service provider and capable of being dynamically configured in a customized manner by the second service provider.

However, Ramstrom illustrates in Figure 6, a software system of the network consisting of a single exchange, element 51, having a plurality of separate logical nodes and functionality of those nodes and interconnections between them is incorporated into single exchange, element 52, containing the software system [Ramstrom, Column 8, Lines 11-58]; element 52 being a switch consisting of different modules supporting a variety of services according to the network nodes. Since the single exchange 53 is functionally dependent on the switch device 52 for service, it is evident that the logical nodes are a part of the switching entity. It is also noted that a switch can render different services to their respective subscribers by having the switch programmed with the functionality required for each type of telecommunication service to be rendered [Ramstrom, Column 2, Lines 6-13].

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify the communication system teaching of Nara and Ana to associate a first logical node to a first service provider and having the service provider configuring the node to offer services compatible to its client network and to associate a second logical node to a second service provider and having the service provider configuring the node to offer services compatible to its client network of Ramstrom. The

benefiting result of the combination would be the implementation of assigned service elements [Ramstrom, Column 3, Lines 64-67].

Regarding **claims 5 and 15**, Nara teaches the telecommunications system of Claim 3, but fails to teach the unified and integrated switch is within said first network, the first service provider being a wholesale service provider, the second service provider being a retail service provider.

However, Ramstrom discloses in Figure. 5 an illustrative diagram of multiple networks, or exchanges interconnected with one another in a communication network. It is disclosed that a local exchange 31 serves its local subscribers, or end users, and connected via trunk lines to another 33, which is in turn connected to the international gateway exchange 34. The international exchange 38, for example, consists national exchange 40 which includes a plurality of subscribers and are connected by means of trunk lines 41 [Ramstrom, Column 7, Lines 55-64]. Thus, the marketplace reflects an implementation of supporting services between local subscribers between different geographical locations is commonplace.

Therefore, it would have been obvious to one with ordinary skill in the art combine the teachings of Nara and Ana indicating a communications system with the ability to recognize the first network with the switch as the international exchange 38 as the wholesale service provider that provides service to the second network, a retail service provider 40 at a national level, which in turn provides services to its local subscribers as shown in Ramstrom, in order to gain the commonly understood benefits

of such adaptations, such as reduced expense costs, simplified operation, and increased optimum performance and reliability.

Regarding **claims 8 and 18** Nara teaches the telecommunications system that obtains real-time availability information via update messages exchanged between network devices [Nara, Column 3, Lines 28-37], but fails to teach a software engine configured to receive the request for the inter-provider IP service, calculate pricing scenarios using the request, obtain real-time resource information, calculate real-time prices for each of the pricing scenarios using the real-time resource information and customize the cost information based on the knowledge of the identities of the first service provider and the second service provider, the request and the real-time prices.

Ramstrom et al disclose a method for calculating cost information by configuring software in the application service modules such as transaction manager and charging manager to generate a record of the cost to the subscriber's account [Ramstrom, Column 38, Lines 22-63, Column 41, Lines 45-56].

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify the teaching of Narayanan to include service application modules such as a transaction manager and a charging manager to serve as the means for calculating real time price scenarios as taught by Ramstrom et al based on service providers, requests, and real time prices. One is motivated as such to introduce new technologies and upgrades constantly to the already existing telecommunication

network by modifying the previously designed application modules [Ranstrom, Column 37, Lines 15-20].

Regarding **claim 9 and 19**, Nara teaches the telecommunications system comprising a database [See Nara, Figure 2, Elements 116, 118] for storing the real-time resource information [Nara, Column 5, Lines 6-12].

Regarding **claims 10 and 20**, Narayanan teaches the telecommunications system of Claim 9, wherein said means for provisioning includes an operational support system (i.e., processor 102, FIG. 2) connected to said software engine (i.e. routing software 114, FIG. 2) and said database (116, 118, FIG. 2), said operational support system being further configured to manage the inter-provider IP service in real-time [Nara, Column 4, lines 62-67].

Regarding **claim 21**, Nara teaches the method of provisioning service across networks by incorporating network infrastructure and resources in said provisioning (i.e. routers, public keys and SLAs), but fails to teach incorporating business relations among the at least two services providers dynamically and in real-time in said provisioning, wherein the business relations include at least contracts and prices; and incorporating business objectives in said provisioning, wherein the business objectives include at least one of financial ratios, service volume and profitability

However, Ramstrom discloses the business relations between two service providers are outlined in dynamic real-time transactions where contracts and prices are created as a result of the business relation [Ramstrom, Column 41, Lines 45-56]. Business objectives are also present due to the telecommunication network being capable of supporting a variety of services such as ISDN, PSTN, and private network which are tailored to meet various business demands [See Ramstrom, Figure. 6]. Therefore, service volume for the different network nodes dictates one of the important aspects in business objectives. Furthermore, Ramstrom explain the goal of expanding functionality in a telecommunication system by upgrading hardware components and adding new software capabilities is often undesirable since telecommunication companies are interested in minimizing cost while maintaining the quality of service offered to their subscribers [Ramstrom, Column 2, Lines 36-42]. Ramstrom propose a method to reduce expenses by implementing application modules that can be programmed by software to support a variety of services as required by the different network [Ramstrom, Column 2, Lines 14-21].

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify the teaching of Narayanan to include business relations and business objectives in the provision of network services. One is motivated as such to provide necessary servicing functions to integrate functionality to existing application module via existing interfaces with new application modules via new interfaces [Ramstrom, Column 41, Lines 35-39] and to enable efficacious growth of future communication services [Ramstrom, Column 42, Lines 27-31].

Regarding **claim 22**, the combination of Nara and Ana teaches the telecommunications system provisioning inter-provider IP services, such as the Exterior Gateway Protocol [Nara, Column 1, Lines 28-38], but fails to teach a unified and integrated switch connected to said first network and said second network, said unified and integrated switch is operable to add a portion of said common resources dedicated to the first logical communications node to the second logical communications node to provision the inter- provider IP service.

However, Ramstrom teaches a switch component [See Ramstrom, Fig. 6, Element 52] that connects a plurality of network nodes shown as elements 53, 54, 55, and 56. The switch 52 consists of application modules shown as elements 65, 66, and 67 to handle the functions of the plurality of networks connected to it. The switch further includes common resources 69 being provisioned to each network node [See Ramstrom, Fig. 6, Column 8, lines 30-52]. Additionally, Ramstrom shows that the switch can support different services for the many network nodes as long as the required software is added to the application modules [Ramstrom, Column 2, Lines 14-21]. Since the common resources are accessible by network modules, it is evident that the sources can be configured according to the service a particular network node is compatible with.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to modify the teaching of Nara and Ana, indicating a system of networks implementing IP services, to include a switch for connecting the networks and for configuring the shared resources as taught by Ramstrom. The benefiting result of

the combination would be the allowance of multiple specific telecommunication applications to be performed with optimum functionality within the same switch device [Ramstrom, Column 3, Lines 10-15].

Response to Arguments

Applicant's arguments filed 02/10/2009 have been fully considered but they are not persuasive.

Applicant states that Ananian does not teach the feature of "...***anonymously advertising*** availability information indicating real-time availability of the plurality of resources of a said first network and a second network."

The Examiner respectfully disagrees. Narayanan (hereinafter Nara) is used to teach a communication system comprising several networks shown as a plurality of ISPs (i.e. ISP 1-2) that provision inter-providers IP services (i.e. SLAs) between each other. Accordingly these ISPs maintain networking element resources such as, routers, which in turn maintain and exchange updated current path reach-ability information, interpreted as advertisements, using their internal routing tables, between different networks [Nara, Column 5, Lines 1-9 and 22-34 and Column 6, Lines 8-11]. Thus Narayanan teaches advertising availability information indicating real-time availability of the plurality of resources of a said first network and a second network, although it

teaches the exchanging of the availability information interpreted as advertising, there is no disclosure of this exchanging being anonymous.

Ananian is relied upon to teach this aspect of distributing information anonymously, which is disclosed by Ananian in the form of anonymously capturing and peer sharing through multiple channels and communication devices. [Ana, Paragraph 2]. Further specified in Ananian's description of peer sharing and instant catalog exchange whereby an intermediate network element allows users to anonymously share catalog items or groupings [Paragraph 411, Lines 1-9].

Applicant states that the combination of Nara, in view of Ana, and further in view of Ramstrom does not teach the entire feature of "...a unified and integrated switch connected to said first network and second network, said unified and integrated switch having common resources, a first portion of the common resources being dedicated to the first service provider and being capable of being configured by the first service provider, a second portion of the common resources being dedicated to the second service provider and being capable of being configured by the second service provider." Specifically Ramstom fails to teach "that the single switch includes common resources and that the switch is dedicated to a service provider"

The Examiner respectfully disagrees. Nara teaches that the communication systems comprise several networks shown as a plurality of ISPs (i.e. ISP 1-2) that have dedicated BGP routers 31, 41, and 51 , shown in Fig.1 and interpreted as a single

switches that include routing tables having routing information pertaining to current path reach-ability [See Nara, Figure 2, Element 116]. Nara teaches that there is an exchange of updated current path reach-ability information, interpreted as advertisements, using their internal routing tables, between different networks, thereby making these resources common to all [Nara, Column 5, Lines 1-9 and 22-34 and Column 6, Lines 8-11]. In addition to Nara teaching these features Ramstom also teaches a switch component [See Ramstrom, Fig. 6, Element 52] that connects a plurality of network nodes shown as elements 53, 54, 55, and 56. The switch 52 consists of application modules shown as elements 65, 66, and 67 to handle the functions of the networks connecting to it. The switch further includes common resources 69 being dedicated to each network node [See Ramstrom, Fig. 6, Column 8, lines 30-52]. Additionally, Ramstrom shows that the switch can support different services for the many network nodes as long as the required software is added to the application modules [Ramstrom, Column 2, Lines 14-21]. Since the common resources are accessible by network modules, it is evident that the sources can be configured according to the service a particular network node is compatible with.

Applicant states that the combination of Nara, in view of Ana fails to teach "calculating cost information in real-time for use of the addition resources for the inter-provider IP service prior to provisioning the inter-provider IP service ...",

The Examiner respectfully disagrees. Nara teaches a telecommunications system [Nara Figure. 1, Element 10] with a means for calculating real-time cost information prior to provisioning services such as cost, traffic characteristics and peering points, described as SLA attributes. In which the agreed upon attributes between devices, which serve as evidence of a comparison, are interpreted as the cost requirements and the cost information of the system, and as a result of the agreement of the SLA, also interpreted as an electronic contract, determine whether to utilize cryptographic resources [Nara, Column 5, Lines 22-53].

Applicant states that the combination of Nara, in view of Ana fails, and further in view of Ramstorm do not teach "calculating pricing scenarios or real-time prices for pricing scenarios."

The Examiner respectfully disagrees. Ramstrom et al disclose a method for generating based on real-time or by using history information calculated cost information by configuring software in the application service modules such as transaction manager and charging manager to generate a record of the cost to the subscriber's account [Ramstrom, Column 38, Lines 22-63, Column 41, Lines 45-56].

Applicant states that the combination of Nara, in view of Ana, and further in view of Ramstom fails to teach or suggest that "contracts" among different application modules are incorporated into the provisioning process.

The Examiner respectfully disagrees. Nara is used to teach a communication system comprising several networks shown as a plurality of ISPs (i.e. ISP 1-2) that provision inter-providers IP services (i.e. SLAs, which are a agreement/ type of contract) between each other.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LONNIE SWEET whose telephone number is (571)270-3622. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on (571) 272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. S./
Examiner, Art Unit 2419
/Pankaj Kumar/
Supervisory Patent Examiner, Art Unit 2419